



Chart 2.—Lee-White Clotting Time Related to Methylprednisolone Administration.

The mode of action of anti-factor VIII anticoagulants is uncertain. Evidence supporting both immunologic and enzymatic mechanisms has been advanced,<sup>1,3</sup> but neither hypothesis is without objection. In view of the wide range of associated disorders, it is possible that the mechanism is not the same in all instances. The fortunate outcome in the present case suggests that steroid therapy may be beneficial in some patients in modifying the clinical course until spontaneous remission occurs.

#### SUMMARY

A patient with an apparently "idiopathic" anti-factor VIII circulating anticoagulant is described. Complete recovery occurred coincident with the administration of methylprednisolone.

Fresno Medical Group, 1300 North Fresno Street, Fresno, California 93703.

ACKNOWLEDGMENT: The author is indebted to Dr. Paul Aggeler for the special coagulation studies, and for invaluable assistance in the management of this patient.

#### REFERENCES

1. Breckenridge, R. T., and Ratnoff, O. D.: Studies on the nature of circulating anti-coagulant directed against anti-hemophilic factor with notes on an assay for anti-hemophilic factor, *Blood* XX, 137, August 1962.
2. Cooke, J. V., Anderson, J. B., and Gamble, W. S.: Circulating factor VIII anti-coagulant in bullous dermatitis, *Arch. Int. Med.*, 110:511, October 1962.
3. Craddock, C. G., Jr., and Lawrence, J. S.: Hemophilia; Report of the mechanism of the development and action of an anti-coagulant in two cases, *Blood*, 2:205, 1947.
4. Horowitz, H. I., and Fujimoto, M. M.: Acquired hemophilia due to a circulating anti-coagulant, *Amer. J. Med.*, 33:501, October 1962.
5. Lee, M. L., and Raccuglia, G.: Acquired inhibitor of blood coagulation, *Ann. Intern. Med.*, 56:946, June 1962.
6. Margolius, A., Jackson, D. P., and Ratnoff, O. D.: Circulating anti-coagulants: A study of 40 cases and a review of the literature, *Medicine*, 40:145, May 1961.
7. Rapaport, S. I., Ames, S. B., and Duvall, B. J.: A plasma coagulation defect in SLE, arising from hypoprothrombinemia combined with anti-prothrombinase activity, *Blood*, 15:212, February 1960.
8. Sise, H. S., Gauthier, J., Desforbes, J., and Becker, R.: Spontaneous circulating anti-coagulant (anti-factor VIII), *Amer. J. Med.*, 32:964, June 1962.
9. Verstraete, M., and Vandenbroucke, J.: Deficient thromboplastin formation in man, *Amer. J. Med.*, 22:634, 1957.
10. Verstaete, M., and Vandenbroucke, J.: Occurrence and modes of action of endogenous circulating anti-coagulants, *J. Lab. and Clin. Med.*, 48:673, 1956.

## An Unusual Manifestation of Hypoglycemia

HERSCHEL L. COPELAN, M.D., Los Angeles

PROFOUND ALTERATION in function of the central nervous system in association with hypoglycemia is well recognized. Hemiparesis or hemiplegia is one of the less frequently encountered complications of the hypoglycemic state.

A 40-year-old Negro man was seen in the Admitting Service at Wadsworth General Hospital on Thanksgiving Day, 1962, because of complete paralysis of the right arm and weakness of the right leg, of five hours' duration. While being transferred to the neurology ward, he became comatose and unresponsive.

Physical examination was carried out in the neurology ward. The patient was well developed, well nourished and muscular. He was unconscious, unable to carry out any commands or answer questions or mutter. The rectal temperature was 98° F, the pulse rate 72, the blood pressure 110/70 mm of mercury. The head and eyes were turned to the left. In the right eye the corneal reflex was absent. The right extremities remained inactive throughout the examination, were flaccid and did not move on painful stimulation. Facial grimaces were elicited on pinching of either Achilles tendon. Right lower facial paralysis was apparent. (In the Admitting Service it had been noted the tongue deviated to the right.) Abdominal reflexes were absent on the right. Reflexes were increased in the right upper and right lower extremities. Babinski and Gordon signs were positive on the right. No other abnormalities were noted.

Glucose content of a specimen of blood taken in the Admitting Service was reported, two hours later, as 40 mg per 100 ml, and that of a specimen drawn on admission to the ward was reported as 27 mg per 100 ml. A hemogram and results of urinalysis were within normal limits.

Because of hypotension, an intravenous infusion was started so that vasopressors could be given if needed. After receiving 150 ml of 5 per cent glucose in distilled water, the patient suddenly began to move his right leg. The infusion was quickened and within ten minutes the motor function in the

Submitted June 12, 1963.

right arm began to return, and soon afterward the facial paralysis lessened. Within 45 minutes after the infusion of glucose was begun, approximately 30 gm having been given, the patient appeared perfectly normal and all muscle paralysis had disappeared. His memory was excellent and he was able to give a complete, accurate history. He said that while in prison in 1952 he was diagnosed as having diabetes mellitus. A diet was prescribed and daily injections of insulin were given. The dosage was begun at 45 units and gradually was raised to 80 units of protamine zinc insulin daily in 1958. The acute onset of hypoglycemia was brought about when, due to an upper respiratory tract infection the patient had curtailed his food intake sharply for the previous three days but had continued taking the same amount of insulin. He had never had symptoms of acidosis and never before a hypoglycemic reaction. While he was in the hospital on a diabetic diet, his insulin requirement was 20 units NPH insulin daily. He remained in the hospital four days, then left without leave.

#### DISCUSSION

Since this patient was admitted to the ward with a diagnosis of cerebrovascular accident, it was fortunate that glucose was given parenterally. The several hours' delay that otherwise might have resulted before blood glucose values were determined could have permitted irreparable cerebral damage. Robinson and coworkers<sup>2</sup> carried out an electroencephalographic study of a patient with transient hemiplegia that occurred as a complication of insulin treatment in diabetes mellitus. They noted severe abnormalities which became much less pronounced when the blood glucose level returned to normal by hyperglycemic levels. Differing in this respect from anoxias of other causes, hypoglycemia may be first manifest by focal signs without obvious diffuse cerebral disturbance.<sup>2</sup>

#### SUMMARY

A 40-year-old man was admitted with a diagnosis of cerebrovascular accident. After glucose was given intravenously there was a dramatic disappearance of the right-sided hemiplegia. This case showed that focal signs may be the initial event in hypoglycemia.

708 S. Barrington Avenue, Los Angeles, California 90049.

#### REFERENCES

1. Richardson, J. C., Chambers, R. A., and Heywood, P. M.: Encephalopathies of anoxia and hypoglycemia, *Arch. Neurology*, 1:178, 1959.
2. Robinson, F., Margules-Lavergne, M. P., and Chusid, J. G.: Insulin induced transient hemiplegia in diabetes mellitus, *J. Nerv. and Ment. Dis.*, 114:340, 1951.

## Spontaneous Urethral Prolapse

WILLIAM J. DUNN, M.D., and  
L. RUSSELL MALINAK, M.D., Santa Rosa

URETHRAL PROLAPSE is an unusual cause of symptoms referable to the genito-urinary tract. It consists of an eversion of the urethra through the meatus and may be thought of as a sliding herniation of the urethra upon its supporting structures.<sup>3</sup> Only females are affected. The first case was noted by Solingen, in 1732.<sup>8</sup> Zeigerman<sup>15</sup> reviewed the literature and reported five cases in 1945. Peters<sup>12</sup> recently reported eight additional cases. Data on incidence is widely various; one or two cases in several thousand gynecologic admissions is an approximation. A racial predilection for Negroes has been suggested.<sup>1</sup>

Prolapse of the urethra is seen most frequently in children, in post-menopausal women and in paraplegic women. The highest incidence is between ages 8 and 12 years, and the next highest between 60 and 65 years. The youngest reported patient was five days old, the oldest 92 years. In two-thirds of reported cases the patients are under 15 years of age.<sup>15</sup>

Some reports in the literature make distinction between complete and incomplete prolapse and there is disagreement as to definition. Complete prolapse, in the view of some observers,<sup>4</sup> is prolapse throughout the entire urethral length distal to the vesical junction. Others<sup>10,15,16</sup> refer to prolapse of the entire circumference as complete, and any less as incomplete. We suggest that *complete* be applied only to describe prolapse of the entire urethral length, and that any lesser prolapse be described as *partial*. The term *circular prolapse* would be suitable for that in which the whole circumference is affected, and *segmental prolapse* could be used for eversion of any segment of the whole circumference.

#### REPORT OF A CASE

A seven-year-old white girl entered St. Joseph's Hospital March 2, 1962, with chief complaint of moderate vaginal bleeding for the previous 24 hours. For a day before bleeding began the patient had a dry non-productive cough without fever.

Upon physical examination mild tracheo-bronchitis and an actively bleeding introital mass were noted. The extent and origin of the mass could not be determined. Next day the patient was examined while under anesthesia and the mass was observed to be 2 by 2 centimeters, dark red, edematous, necrotic and bleeding freely. The urethral meatus

From the Department of Obstetrics and Gynecology, Catholic Hospital Residency Program, San Francisco.  
Submitted July 2, 1963.